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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Louis Lagler

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EXAMINER

KIRSCH, ANDREW THOMAS

ART UNIT

PAPER NUMBER

3781

MAIL DATE

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08/03/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/563,338	Applicant(s) LAGLER, LOUIS	
	Examiner ANDREW T. KIRSCH	Art Unit 3781	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 January 2009 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

1. The amendment filed 5/17/2010, has been entered.

Claim Objections

2. Claim 11 is objected to because of the following informalities: "cloure" on page 4, line 6 of claim 11 is interpreted as a typo to mean "closure". Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Claim 1 recites "whereby the body and the lid are separated to each other." It is unclear what is meant for two features to be "separated to each other." Examiner will interpret the limitation as reading "separated *from* each other..."
6. Claim 1 recites the limitation that the lid is positioned immediately adjacent to the opening at a top open end of the ring shaped body when the lid is in the closed position. Claim 1 also recites that the body and lid are separated to [from] each other by a circumferential gap. These limitations are contradictory in that the body and lid cannot be immediately adjacent if there exists a gap between them. For the purposes of examination, the gap will be interpreted a distance which separates a portion of the lid from a portion of the ring shaped body.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action: (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,148,912 (Nozawa hereinafter) in view of U.S. Patent No. 6,460,712 (Smith et al. hereinafter).

FIG.1

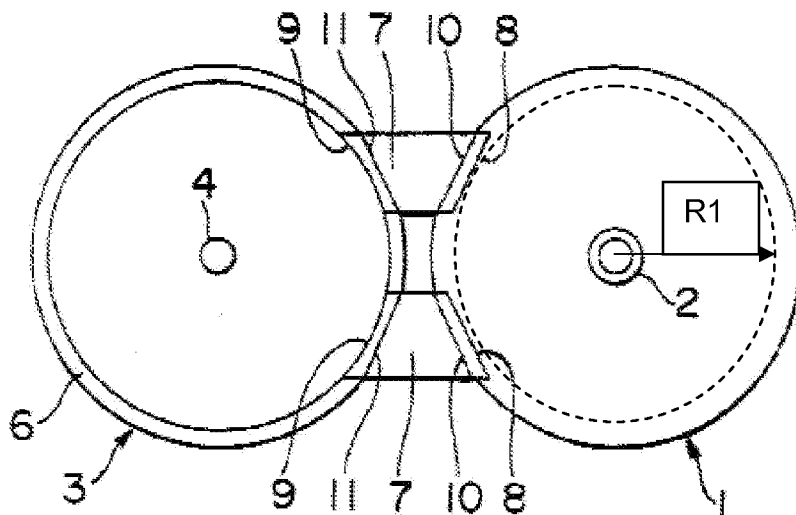


Fig. 1 of US Patent No. 5,148,912 (Nozawa hereinafter)

FIG.4

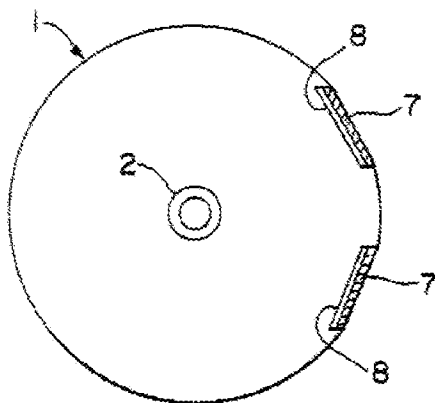
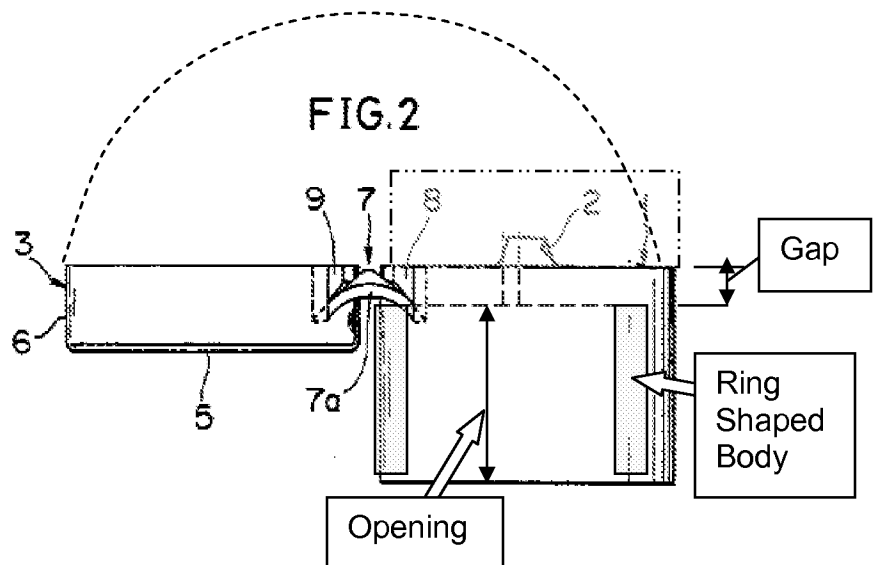


Fig. 4 of Nozawa

FIG.2



9. In re Claim 1, with reference to Fig. 1 and Fig. 4 above, Nozawa discloses: A closure moulded in closed position with

- a ring shaped body (see Fig. 2), the ring shaped body having an opening (see Fig. 2) extending in an axial direction and having substantially the same diameter at

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both ends (see Fig. 2), comprising fixing (col. 7, lines 5-7) means to fix the closure on a neck of a bottle, and

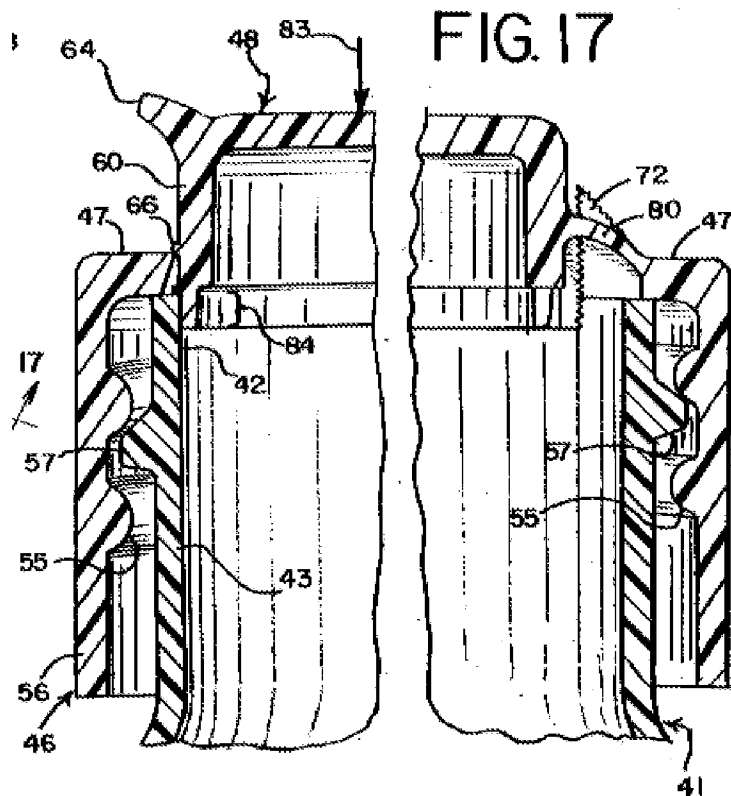
- a lid (3), the lid having substantially the same diameter as the ring shaped body (see fig. 3) and positioned immediately adjacent to the opening at a top open end of the ring shaped body when the lid is in the closed position, the lid comprising a sealing means (4) to seal an orifice (2) of the bottle, whereby the body (see ring shaped body) and the lid (3) are separated to [from] each other by a circumferential gap (see Fig. 2).

- a snap hinge comprising a first and a second trapezoid element (7) and a first and second pair of film hinges (10, 11) each pair defining a first and a second plane (Fig. 4), the first and the second pair of film hinges (10, 11) connecting the first and the second trapezoid element (7) to the lid (3) and to the body (1), whereby the first and the second plane are arranged substantially parallel to an axis A (Fig. 4) of the closure.

10. Note that the opening (2) could also be considered a "circumferential gap" because it is a gap having a circumference, and is between the lid and the body (ring shaped body).

11. Nozawa does not disclose wherein the sealing means directly contacting the neck of the bottle.

12. However, with reference to Fig. 17 below, Smith et al. discloses a closure wherein a sealing member (84) not only seals an orifice (42) of a bottle and the orifice of the body (47, at 66), but also directly contacts the neck (43) of the bottle to better seal the sealing means to the bottle.



13. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the closure Nozawa to have directly contacted the neck of the bottle as taught by Smith et al. for the purposes of providing a more reliable seal and reducing the number of seal joints as possible leak points on the container (column 6, lines 53-58).

14. Claims 2-7, 9, and 10 are rejected under 35 U.S.C 103(a) as being unpatentable over Nozawa in view of Smith et al. as applied to claim 1 above, and further in view of US Patent No. 6,041,477 (Rentsch et al. hereinafter).

15. In re Claim 2, Nozawa in view of Smith et al. disclose the claimed invention except wherein the first and second pair of film hinges are arranged at an angle Φ to

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each other, and the first and the second plane defined by the first and the second pair of film hinges are arranged at an angle ω , the angle Φ and an opening angle α of the closure is:

$$\phi / 2 = a \tan \left[\frac{\sin(\alpha)}{1 - \cos(\alpha)} \sin\left(\frac{\omega}{2}\right) \right]$$

16. However, Rentsch et al. discloses the first and second pair of film hinges are arranged at an angle Φ to each other, and the first and the second plane defined by the first and the second pair of film hinges are arranged at an angle ω , the angle Φ and an opening angle α of the closure is:

$$\phi / 2 = a \tan \left[\frac{\sin(\alpha)}{1 - \cos(\alpha)} \sin\left(\frac{\omega}{2}\right) \right] \text{ (column 13, lines 1-10)}$$

17. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have designed the film hinges of Nozawa in view of Smith et al. according to the known formula taught by Rentsch for the purposes of ensuring two stress free states in the closed and open position during tilting (column 12, lines 58-61).

18. In re claim 3, Rentsch et al. discloses that the opening angle a is in the range of 180° and 240° (col. 3, lines 39-42; col. 4, lines 51-53).

19. In re claim 4, with reference to the Figs. above, Nozawa in view of Smith et al. and Rentsch disclose the claimed invention including wherein the film hinges (10, 11) and the inner periphery of the closure are designed such that they do not protrude over a main inner radius (R1) of the closure (see fig. 1) (the largest inner radius would be from the center of the closure to groove 8, which stores the hinge and therefore would not protrude over the radius).

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20. In re Claim 5, with reference to the Figs. above, Nozawa discloses that that the film hinges (10, 11) are defined by a plane on the inside of the closure and the outside of the film hinges (10, 11) is defined by two flat boundary planes, arranged at an angle each other, and a cylindrical boundary surface having a radius. It is implicit that the boundary planes of the film hinges be at angle to each and have a cylindrical boundary surface otherwise the closure would not open.

21. In re Claim 6, with reference to the Figs. above, Nozawa discloses that the trapezoid elements (7) are spaced apart by a cutout.

FIG. 7

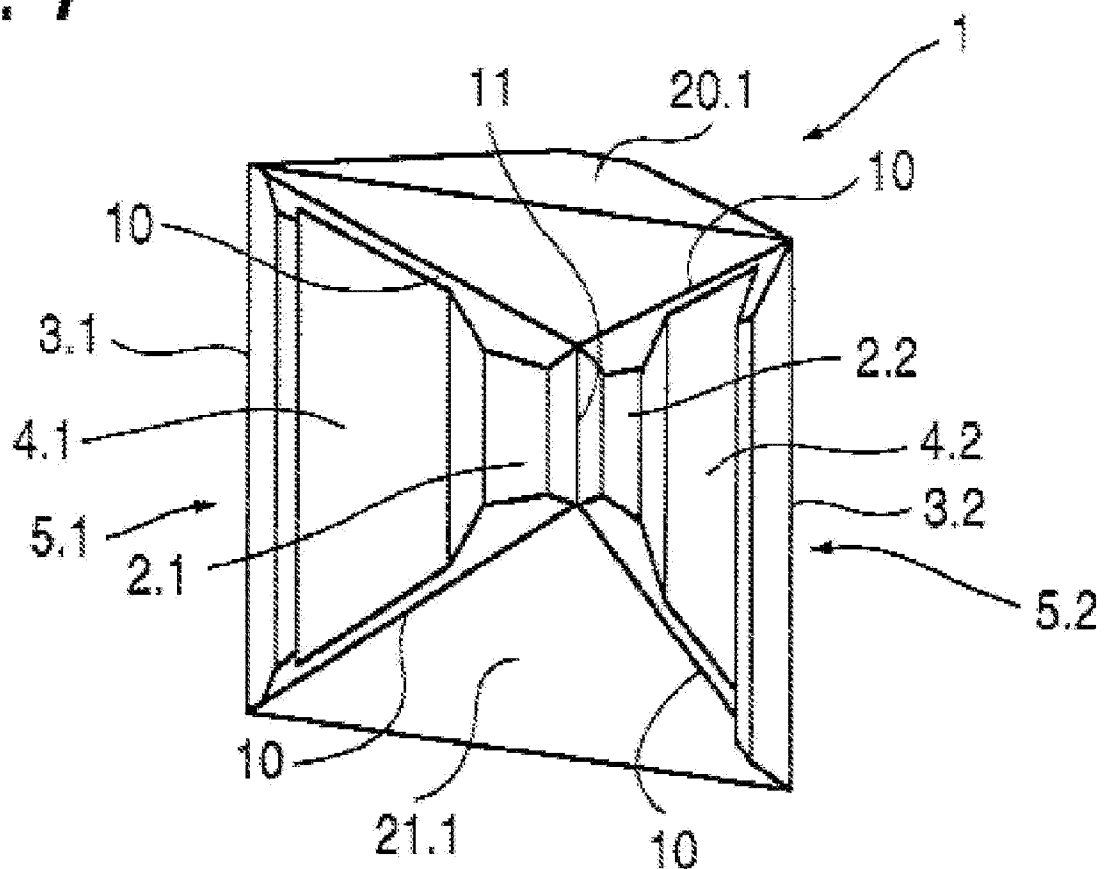
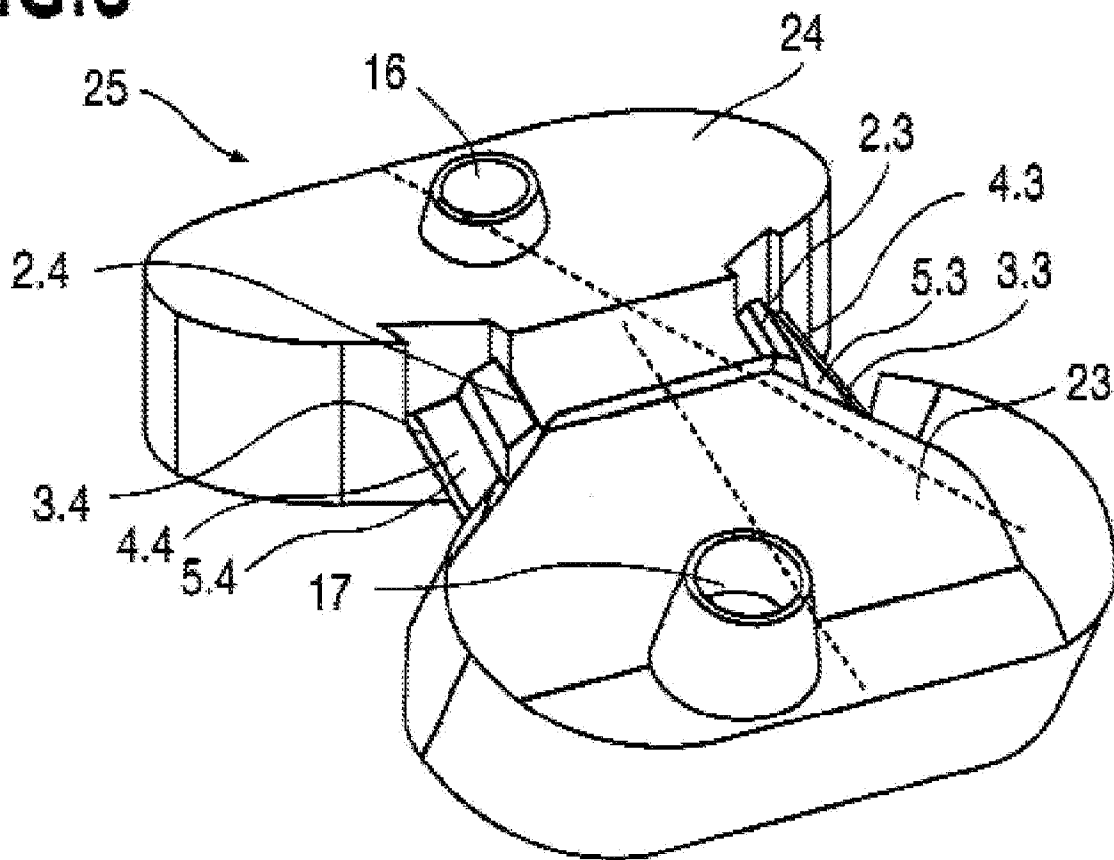


Fig. 7 of Rentsch et al.

22. In re Claim 7, with reference to Fig. 7 above, Rentsch et al. discloses that the trapezoid elements (5.1, 5.2) are connected by a thin film hinge along a shorter edge (11).

FIG.6



23. In re Claim 9, with reference to Fig. 6 above, Rentsch et al. discloses that the body (24) and lid (23) are in the open position spaced a distance s apart, whereby distance s is equal to 50% to 90% of the shorter edge of the trapezoid element (5.4, 5.3). In order for s to be 50% to 90% of the shorter edge of the trapezoid α must be between 120° and 154° or between 206° and 240° . Rentsch et al. discloses that the

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closure is capable of angles greater than 180°. Thus, the closure disclosed by Rentsch et al. can be in either range of angles when in the open position.

24. In re claim 10, with reference to the Figs. above, Nozawa in view of Smith et al. disclose the claimed invention including wherein said closure is characterized by a cylindrical outer wall section. Note that a section (portion) of the closure opposite the hinges is cylindrical.

25. In re claim 11, with reference to the figs. above, Nozawa in view of Smith et al. and Rentsch disclose: A closure, moulded in a closed position, comprising: a ring shaped body including an opening extending in an axial direction between a bottom end and a top end and having substantially a same diameter at both the bottom end and the top end (as in re claim 1); the ring shaped body further comprising a fixing device configured to fix the clo[s]ure on a neck of a bottle; a lid having substantially the same diameter as the ring shaped body and positioned immediately adjacent to the opening at the top end of the ring shaped body when the closure is in the closed position (as in re claim 1); the lid further comprising a seal configured to seal an orifice of the bottle, the seal directly contacting the neck of the bottle; and a snap hinge configured to connect the ring shaped body to the lid such that the body and lid are separated from each other by a circumferential gap (as in re claim 1); the snap hinge further comprising a first and a second trapezoid element and a first and second pair of film hinges, each pair of film hinges defining a first and a second plane, respectively, the first and the second pair connecting the first and the second trapezoid element to the lid and to the

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ring shaped body (as in re claim 1), whereby the first and the second plane are arranged substantially parallel to an axis A of the closure (as in re claim 1).

26. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nozawa in view of Rentsch et al. as applied to claim 1 above, and further in view of US Patent Application Publication No. 2002/0079282A1 (Harrold et al. hereinafter).

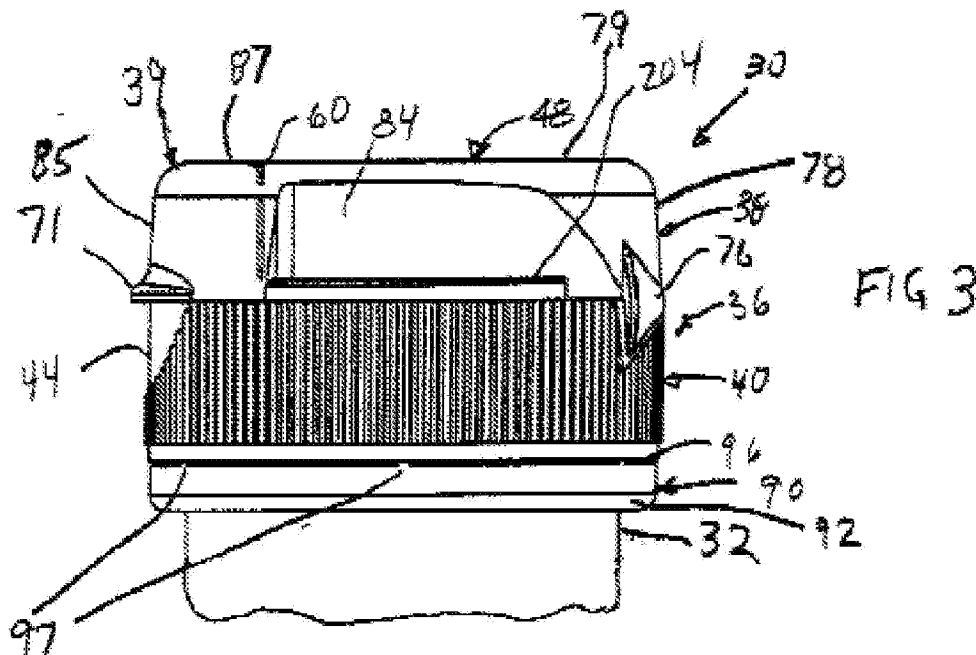


Fig. 3 of US Patent Application Publication No. 2002/0079282A1 (Harrold et al. hereinafter)

27. In re Claim 8, with reference to Fig. 1, Fig. 4, and Fig. 5 above, Nozawa in view of Rentsch et al. discloses the claimed invention except for tamper evidence means.

28. However, with reference to Fig. 3 above, Harrold et al. discloses tamper evidence means (90).

29. Thus, it would have been obvious to one having ordinary skill in the pertinent art at the time the invention was made to have modified the closure disclosed by Nozawa in

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view of Rentsch et al. to have tamper evidence means as taught by Harrold et al. in order to achieve the predictable result of indicating if the closure had been tampered with.

Response to Arguments

30. Applicant's arguments filed 8/27/2009 have been fully considered but they are not persuasive.

31. Applicant argues on pages 6 and 7 of the remarks that the examiner has not provided a reference disclosing the molding of a closure in a closed position. However, the examiner maintains the scenario of molding a closure in a closed position by use of a two-stage mold to be well within the ordinary skill of one in the art at the time of the invention, and further furnishes a reference at the applicant's request. As seen in Fig. 2 of U.S. Patent No. 3,677,431 to Westfall, a two stage molding process is preferred to form the closure (24) and the finish ring (26) in the closed position before being applied to a container. Since the claims of the current application read as apparatus claims, the apparatus need only be capable of being produced by the manufacturing process claimed.

Conclusion

32. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANDREW T. KIRSCH whose telephone number is (571)270-5723. The examiner can normally be reached on M-F, 8am-5pm, off alt. Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Stashick can be reached on 571-272-4561. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andrew T. Kirsch/

Examiner, Art Unit 3781

/Anthony Stashick/
Supervisory Patent Examiner, Art
Unit 3781